

Atty. Docket No. JP9-1999-0308US1
(590.047)

REMARKS

Applicants and the undersigned are most grateful for the time and effort accorded the instant application by the Examiner. The Office is respectfully requested to reconsider the rejections presented in the outstanding Office Action in light of the following remarks.

Claims 1-16 were pending in the instant application at the time of the outstanding Office Action. Of these claims, Claims 1, 4, 7, 8, 11, 13, 14, 15 and 16 are independent claims; the remaining claims are dependent claims. Claims 1, 11, and 16 have been rewritten. Applicants intend no change in the scope of the claims by the changes made by these amendments. It should also be noted these amendments are not in acquiescence of the Office's position on allowability of the claims, but merely to expedite prosecution.

Claims 1-3, 5-6, 11-12 and 16 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Reconsideration and withdrawal of the present rejection is hereby respectfully requested. Claims 1, 11, and 16 have been rewritten in a manner believed to obviate the rejection. The reasons stated in the Office Action for rejection, however, do not appear to apply to Claims 5-6. If the rejection against claims 5-6 is maintained, clarification is requested.

Claims 1-3 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Heisch et al. in view of the Applicant's choice of conversion environment. The Office Action does not state the statutory basis for the rejection of Claims 4-8, 9, 10, 11, 12, and

Atty. Docket No. JP9-1999-0308US1
(590.047)

13-16. Reconsideration and withdrawal of the present rejections are hereby respectfully requested. Based upon the position of the rejections within the Office Action, it appears that the rejections are also based on Section 103(a) and Heisch et al. If this is incorrect, clarification of the rejection of these claims is respectfully requested.

The present invention broadly contemplates optimizing a program that includes branches. The present invention is an improvement over how branch optimization has been carried out in the past, as it addresses the situation where there is a branch whereat the execution frequencies of the individual paths are very biased and the program almost always branches in one direction. (Page 2, lines 5-7) Thus, there is no drastic, exponential increase in the amount of code.

As best understood, Heisch et al. appears to be directed to a preprocessor for software optimization. Optimizing the code at the compiler level is discouraged, as doing so "requires an enormous amount of modification to the compiler and significantly slows compilation time." (Col. 2, lines 16-18) Furthermore, the optimization each of the paths in the code. (Col. 2, lines 41-43) There is no teaching or suggestion in Heisch et al. of addressing the situation where there is a branch whereat the execution frequencies of the individual paths are very biased and the program almost always branches in one direction.

The instantly claimed invention requires specifically "when said object program includes a branch into a series of paths, said program modification unit selects at said branch a specific path to extract, relative to said branch, from the series of paths such that the series of paths are not merged". (Claim 1) Similar language appears in the other

Atty. Docket No. JP9-1999-0308US1
(590.047)

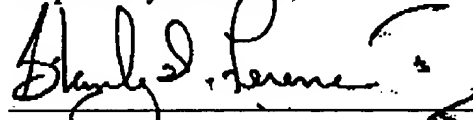
independent claims. Purposely selecting a specific path to extract t is simply not taught or suggested by Heisch et al.

In view of the foregoing, it is respectfully submitted that Claims 1, 4, 7-8, 11, and 13-16 are fully distinguishable over the applied art and are thus allowable. By virtue of dependence from independent claims, it is thus also submitted that Claims 2-3, 5-6, 9-10 and 12 are also allowable at this juncture.

The "prior art made of record" has been reviewed. Applicants acknowledge that such prior art was not deemed by the Office to be sufficiently relevant as to have been applied against the claims of the instant application. To the extent that the Office may apply such prior art against the claims in the future, Applicants will be fully prepared to respond thereto.

In summary, it is respectfully submitted that the instant application, including Claims 1-15, is presently in condition for allowance. Notice to the effect is hereby earnestly solicited.

Respectfully submitted,



Stanley D. Ference III
Registration No. 33,879

Customer Number 35195
FERENCE & ASSOCIATES
400 Broad Street
Pittsburgh, Pennsylvania 15143
(412) 741-8400
(412) 741-9292 - Facsimile

Attorneys for Applicants